

Sacramento Area Council of Governments



# **Connecting “the D’s” to Vehicle Miles Traveled in the Sacramento Region**

Presentation to  
SB375 Regional Targets Advisory Committee  
February 3, 2009

# Purpose



- Show one practical, regional planning application of the D's
- Provide examples of MANY ways to reduce VMT going forward
- Demonstrate that system-wide improvements happen over time
- Stimulate focused RTAC discussion and debate

# Outline



- Vehicle miles traveled as primary indicator
  - Defining area types by average VMT per household
- Land use characteristics of VMT-defined areas
- Drilling down to specifics in prototype areas
- Forecasting results

**Miles Traveled**

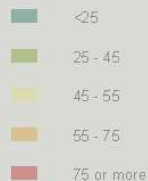
Green	<25
Light Green	25 - 45
Yellow	45 - 55
Orange	55 - 75
Red	75 or more

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# 2005 VMT Per Household

- 2005 reg. average VMT/HH = +/-50 miles
  - Dark green = Group 1--Very Low VMT (< 25 miles)
  - Light green = Group 2--Low VMT (25 – 45 miles)
  - Yellow = Group 3--Average(45-55 miles)
  - Orange = Group 4--High (55-75 miles)
  - Red = Group 5--Very High (75+ miles)

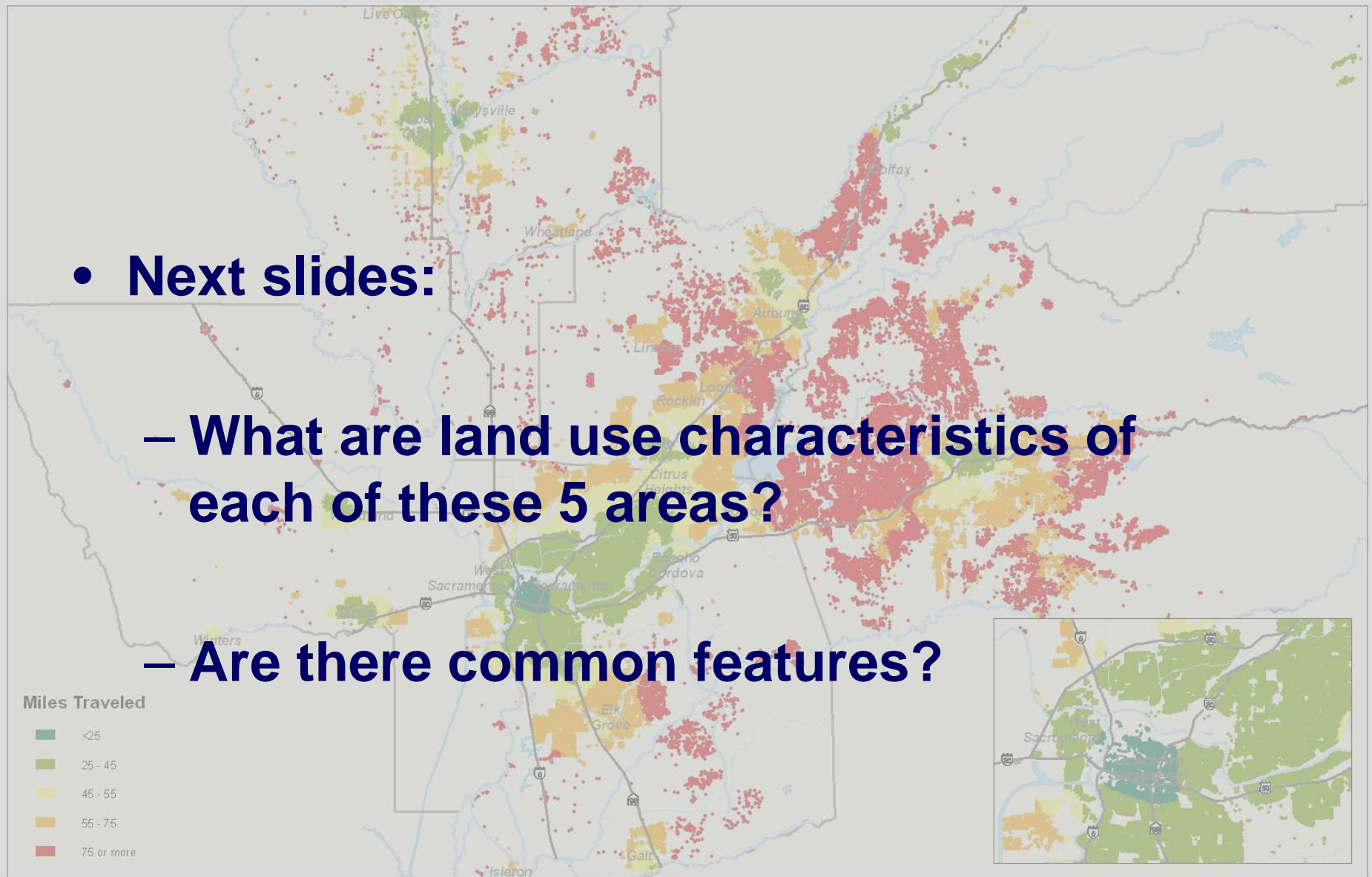
## Miles Traveled





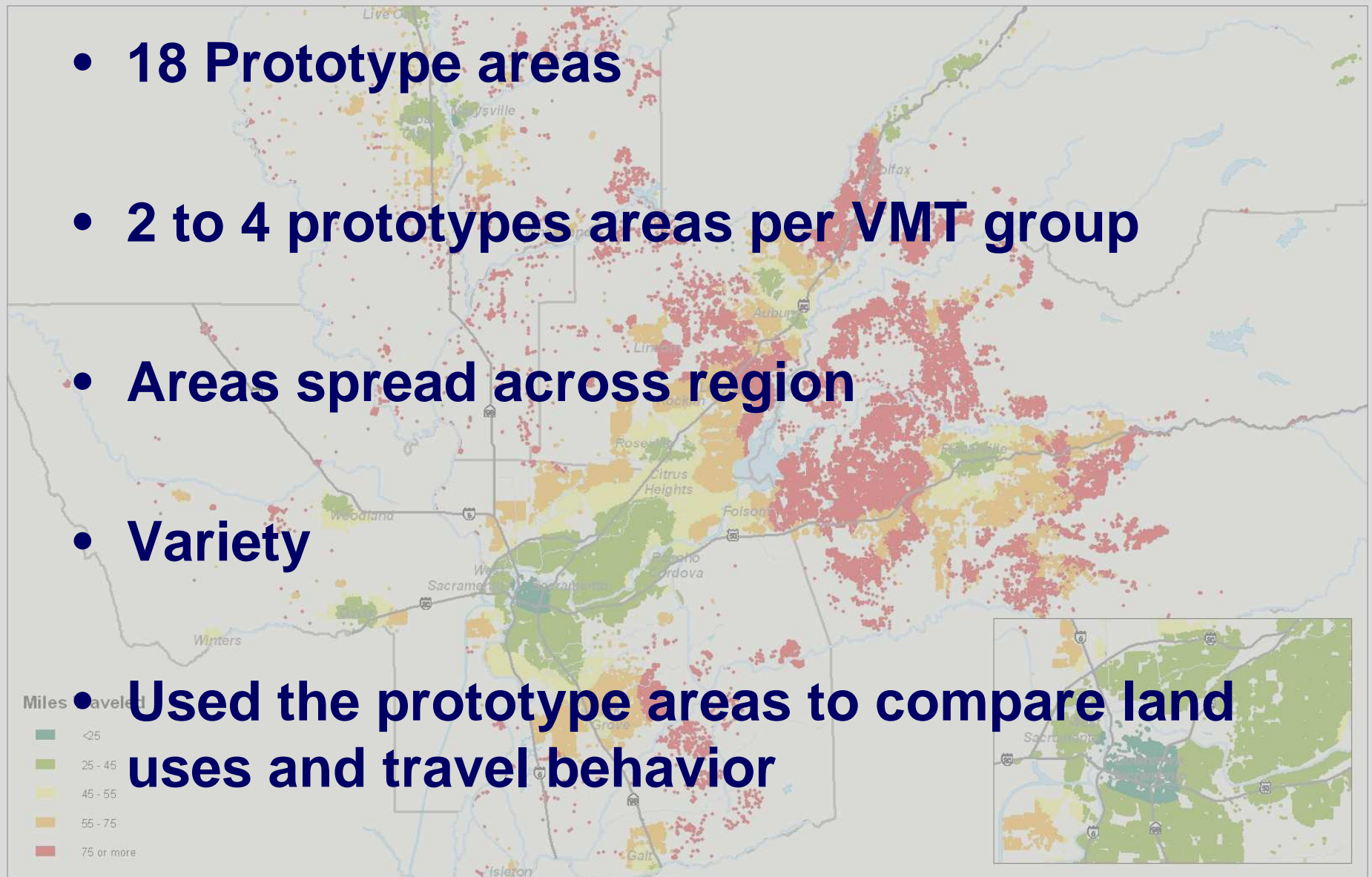
# 2005 VMT Per Household

- **Next slides:**
  - **What are land use characteristics of each of these 5 areas?**
  - **Are there common features?**



# VMT Prototype Areas

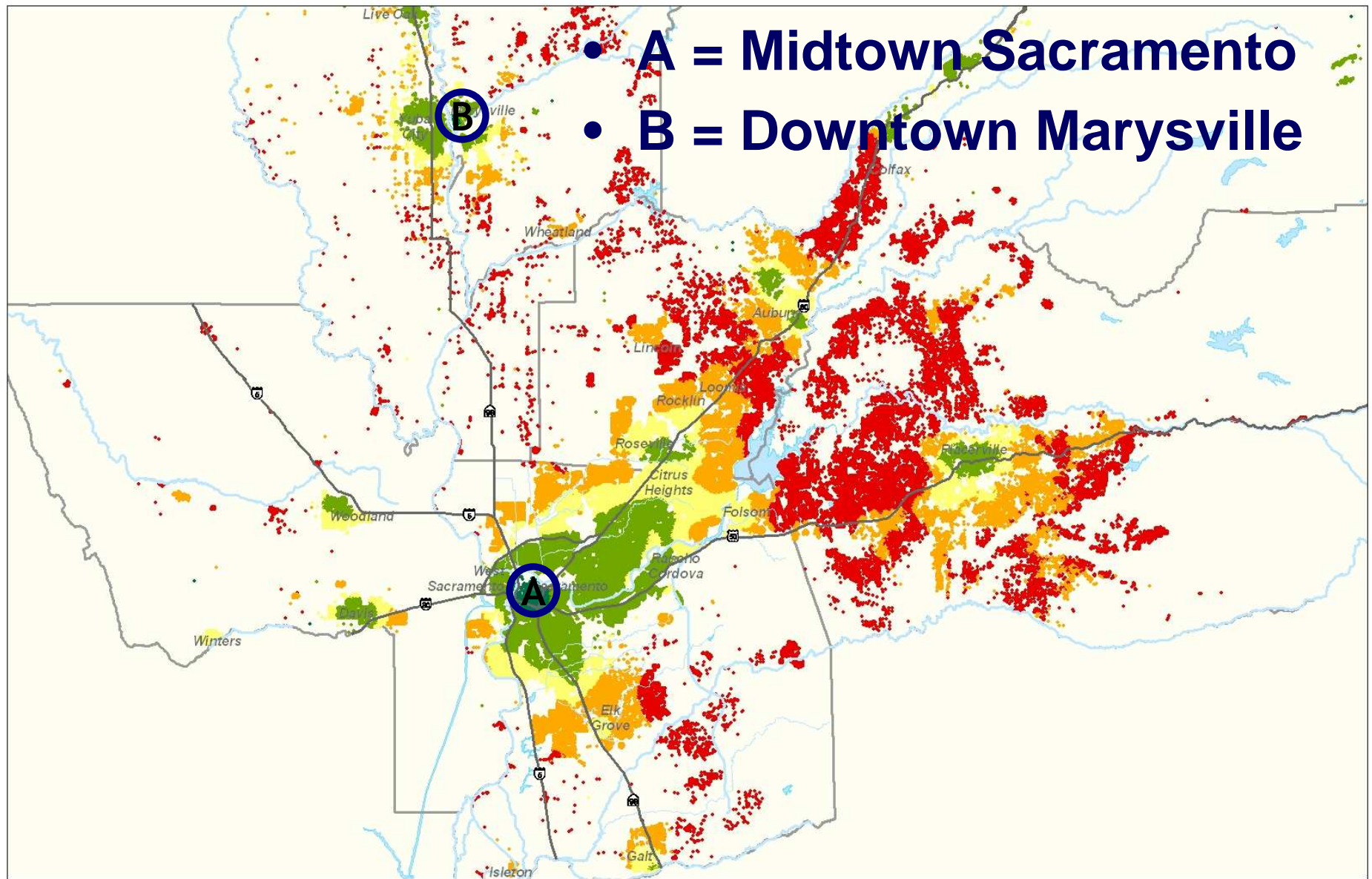
- 18 Prototype areas
- 2 to 4 prototypes areas per VMT group
- Areas spread across region
- Variety
- Used the prototype areas to compare land uses and travel behavior





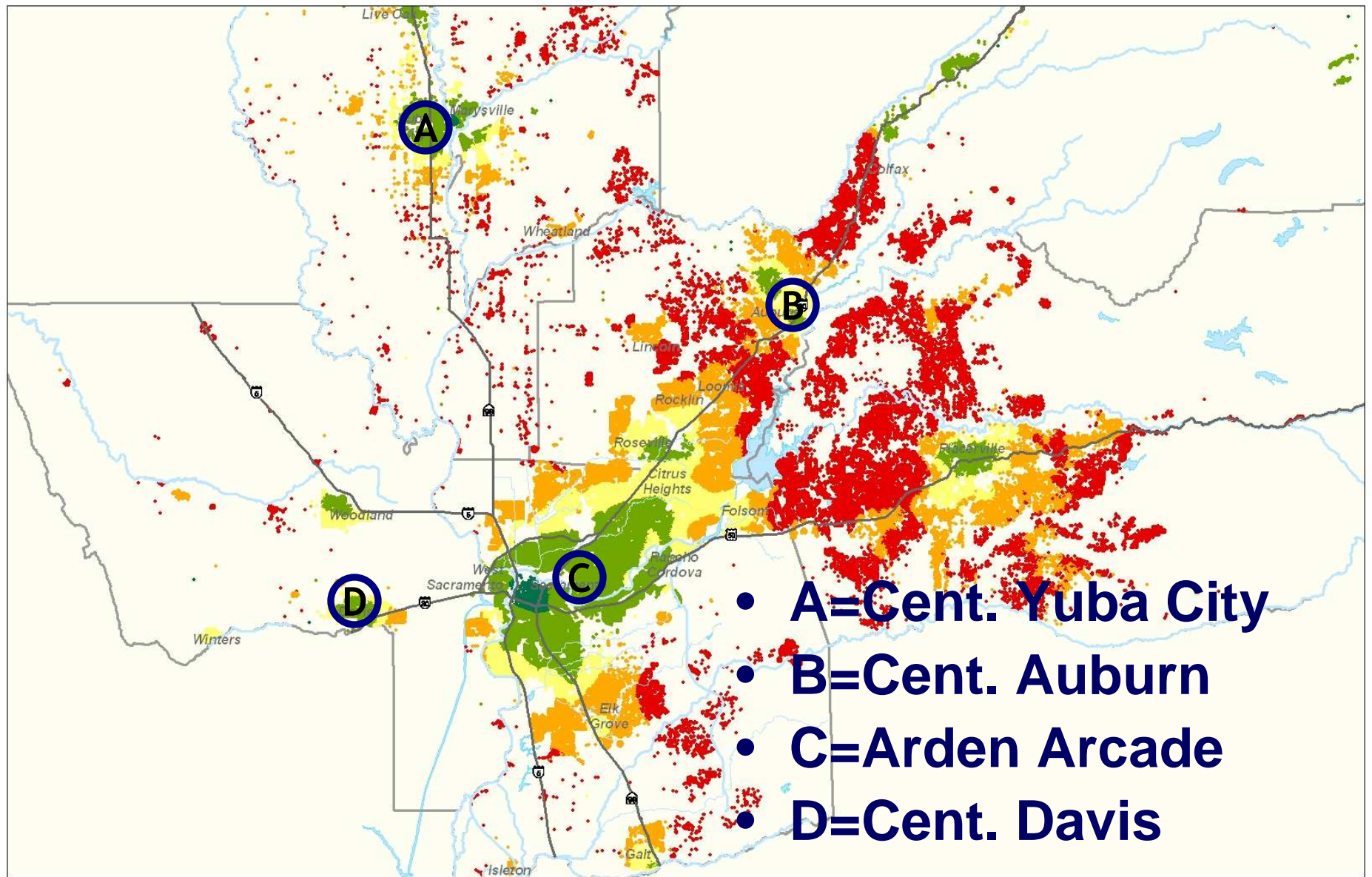
## Very Low VMT Prototypes (Group 1)

- A = Midtown Sacramento
- B = Downtown Marysville

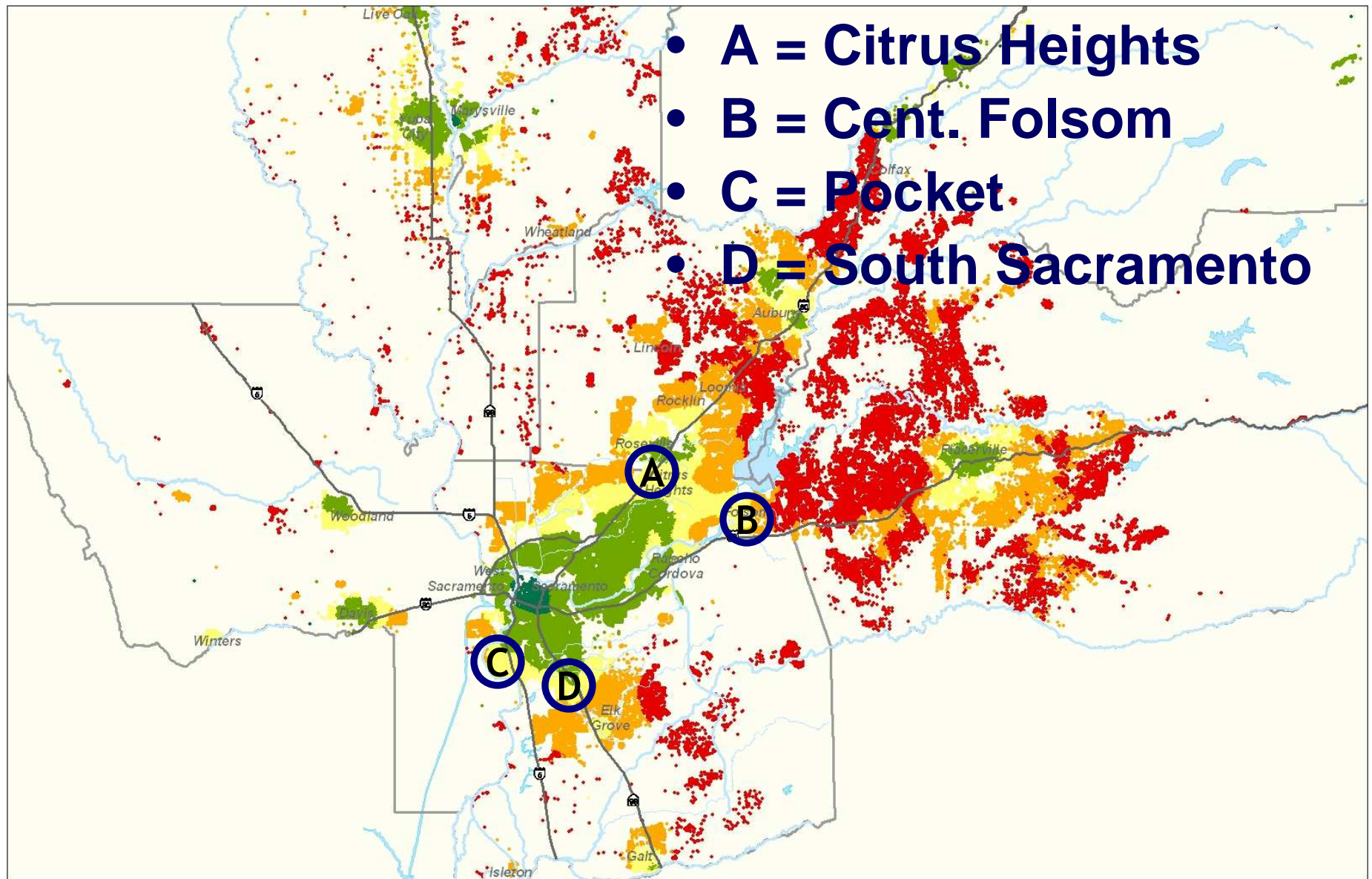




## Low VMT Prototypes (Group 2)

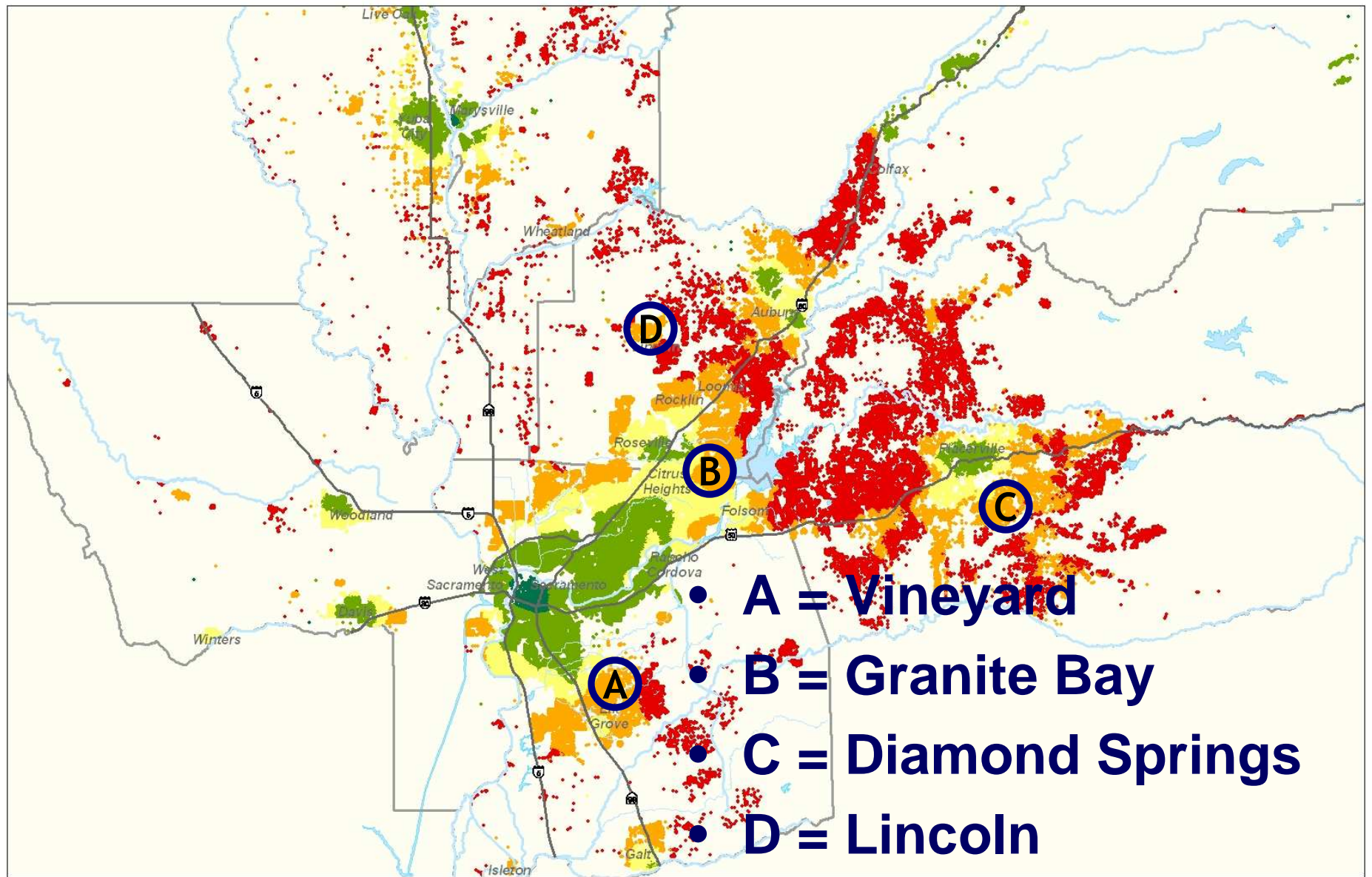


## Average VMT Prototypes (Group 3)





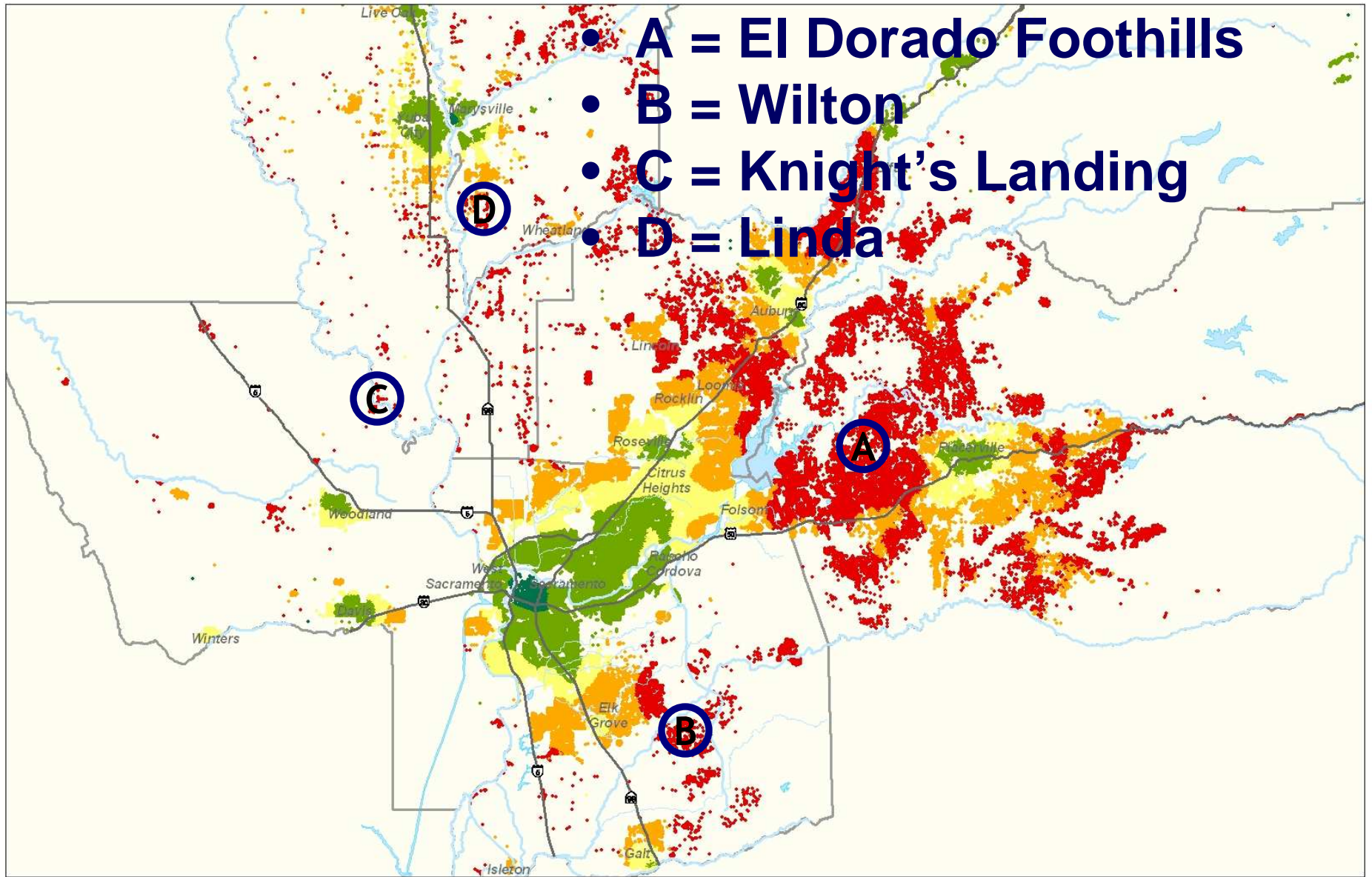
## High VMT Prototypes (Group 4)





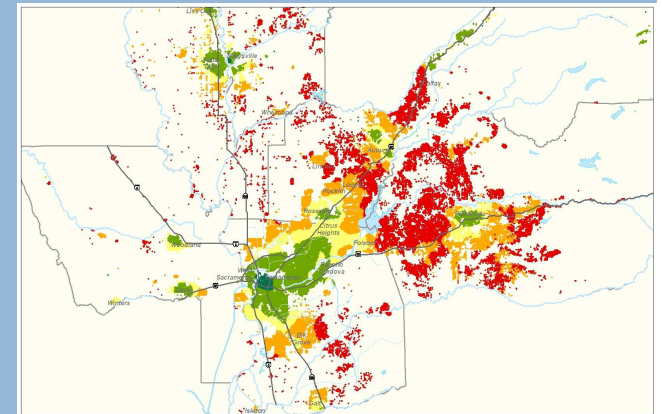
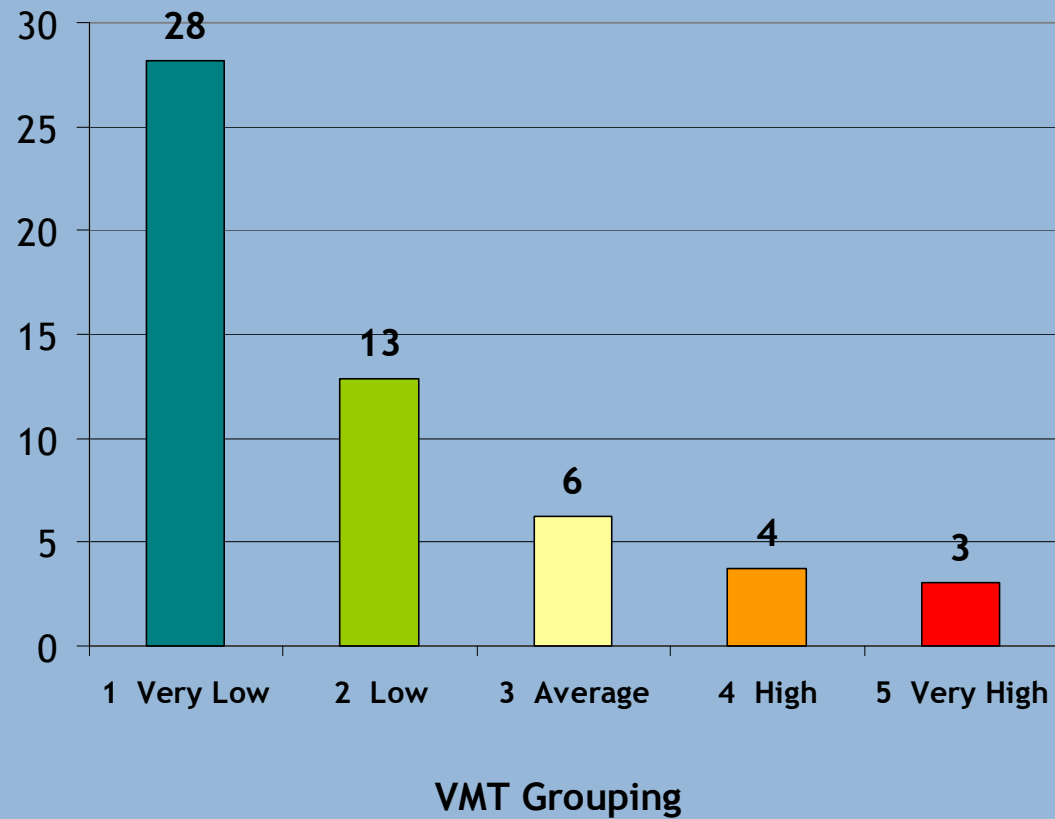
## Very High VMT Prototypes (Group 5)

- A = El Dorado Foothills
- B = Wilton
- C = Knight's Landing
- D = Linda



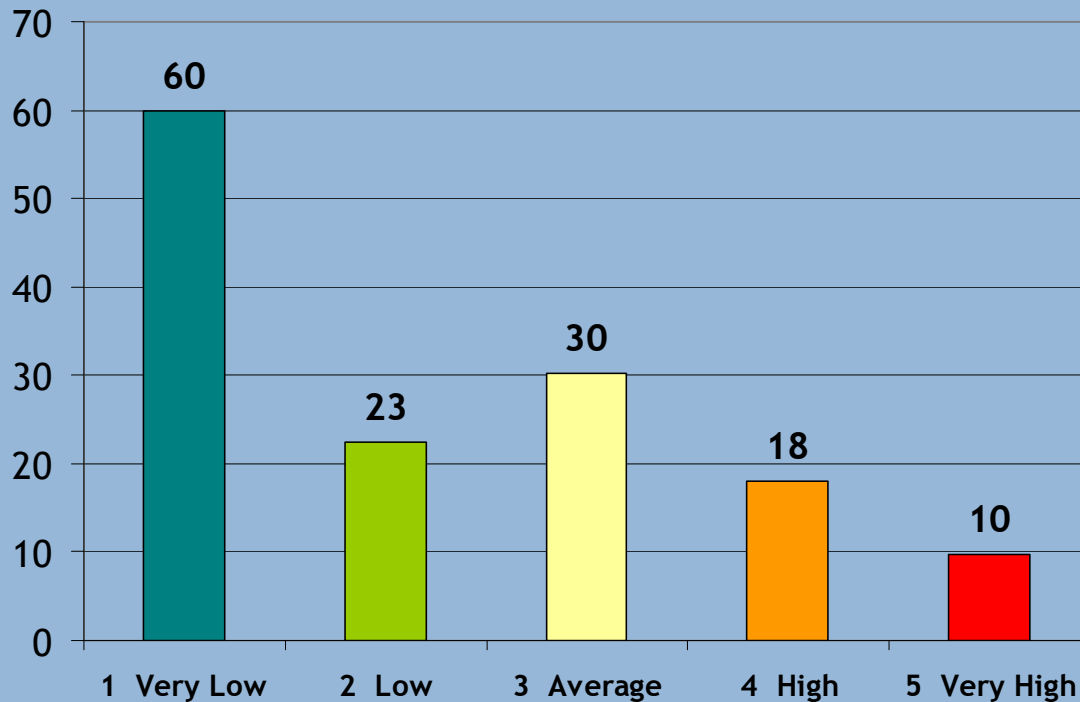
# Density in Prototype Areas

- Density = Jobs + housing per acre at place of residence
- Higher density = lower VMT

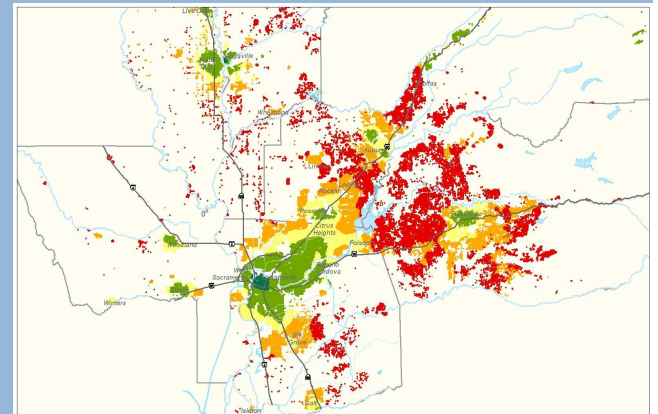


# Street Pattern in Prototype Areas

- Street pattern = density of good intersections at place of residence
- Better street pattern = lower VMT



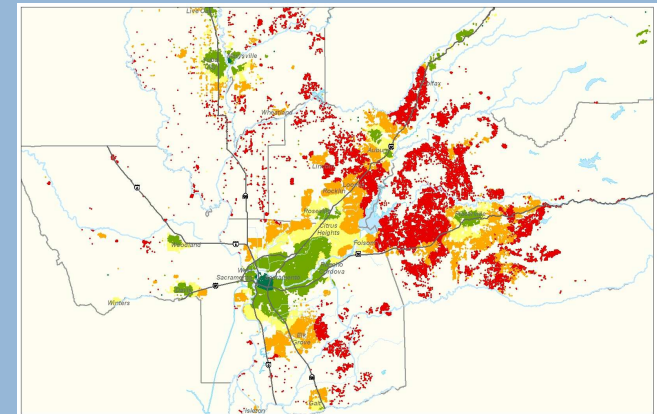
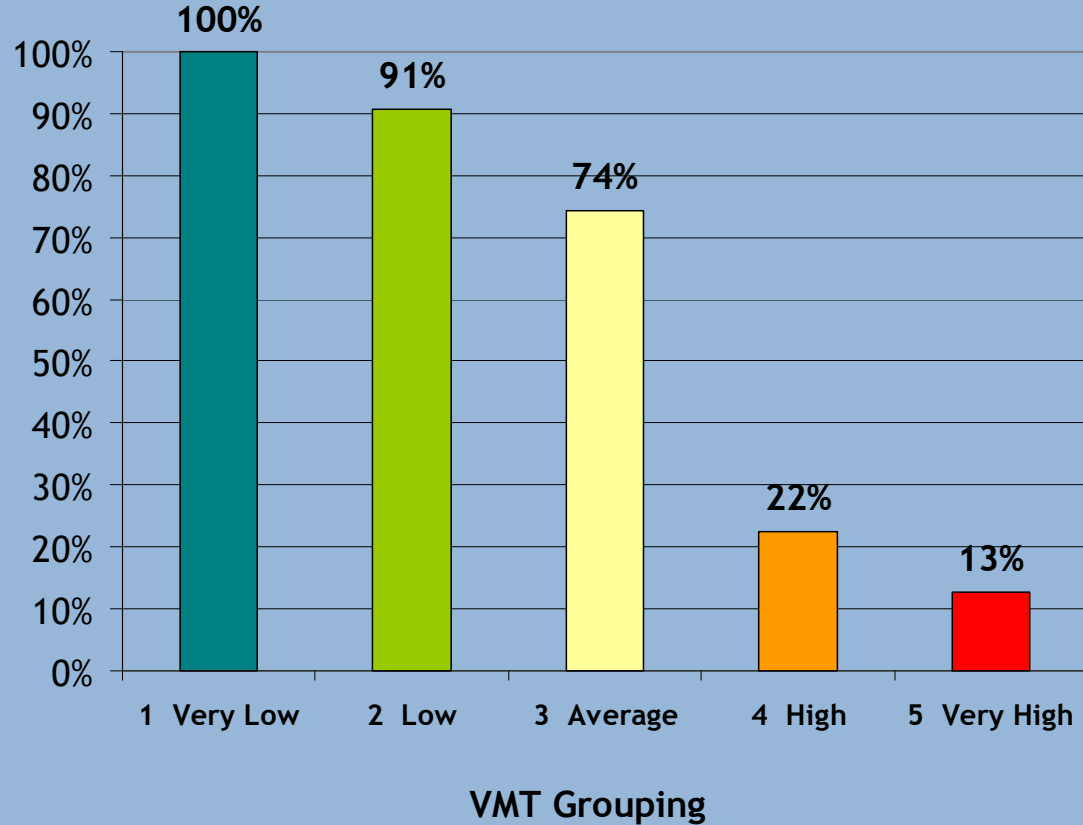
VMT Grouping





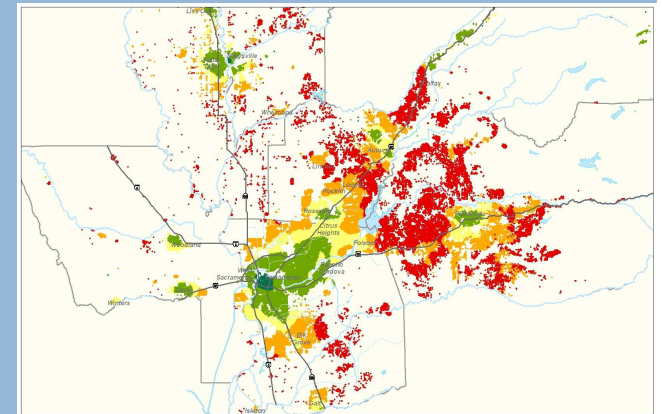
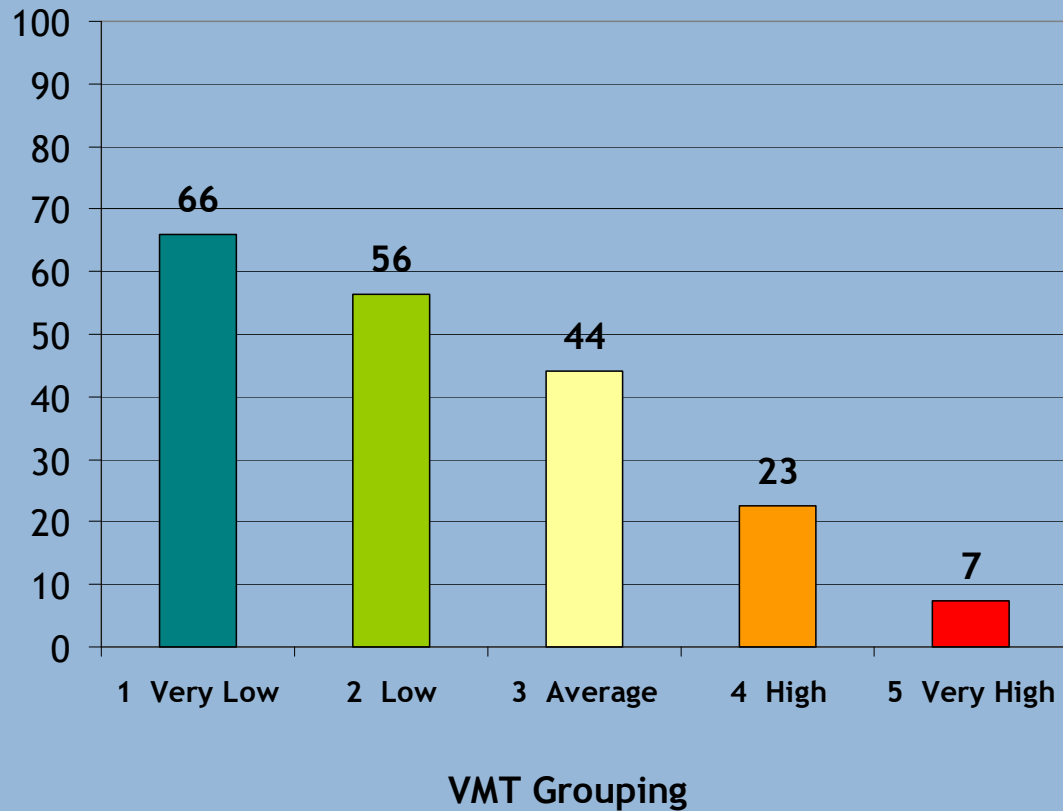
# Transit Proximity in Prototype Areas

- Proximity = % of households within ¼ mile of nearest transit
- Higher proximity = lower VMT



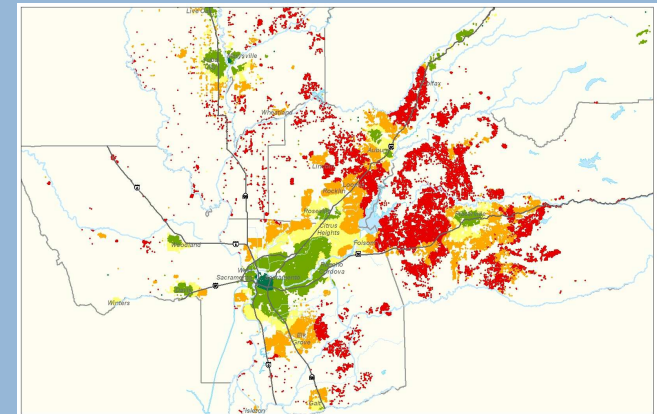
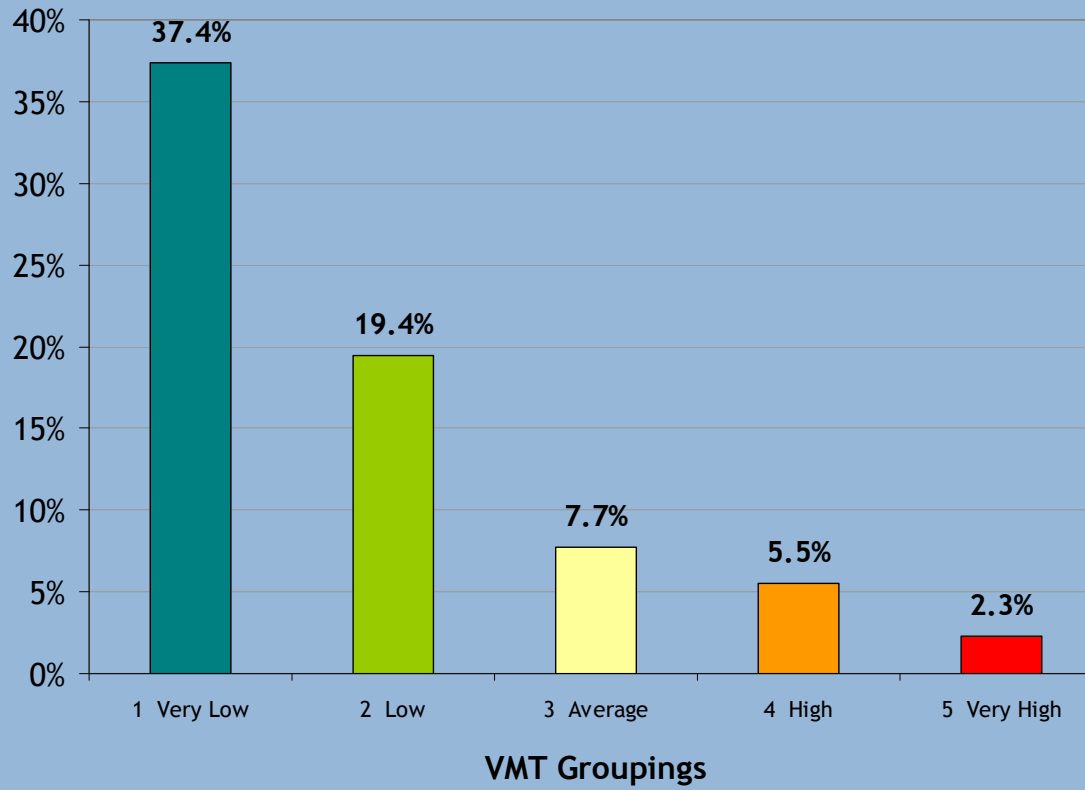
## Mix of Use in Prototype Areas

- Mix Index = 0 (homogeneous development) to 100 (balanced mix)
- More balanced mix = lower VMT



# Bike/Walk Mode Share in Prototype Areas

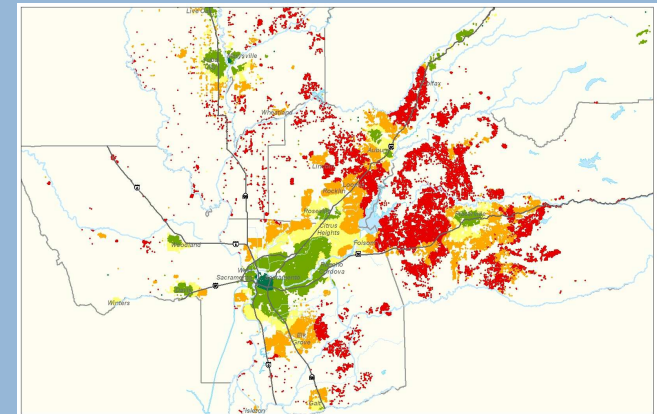
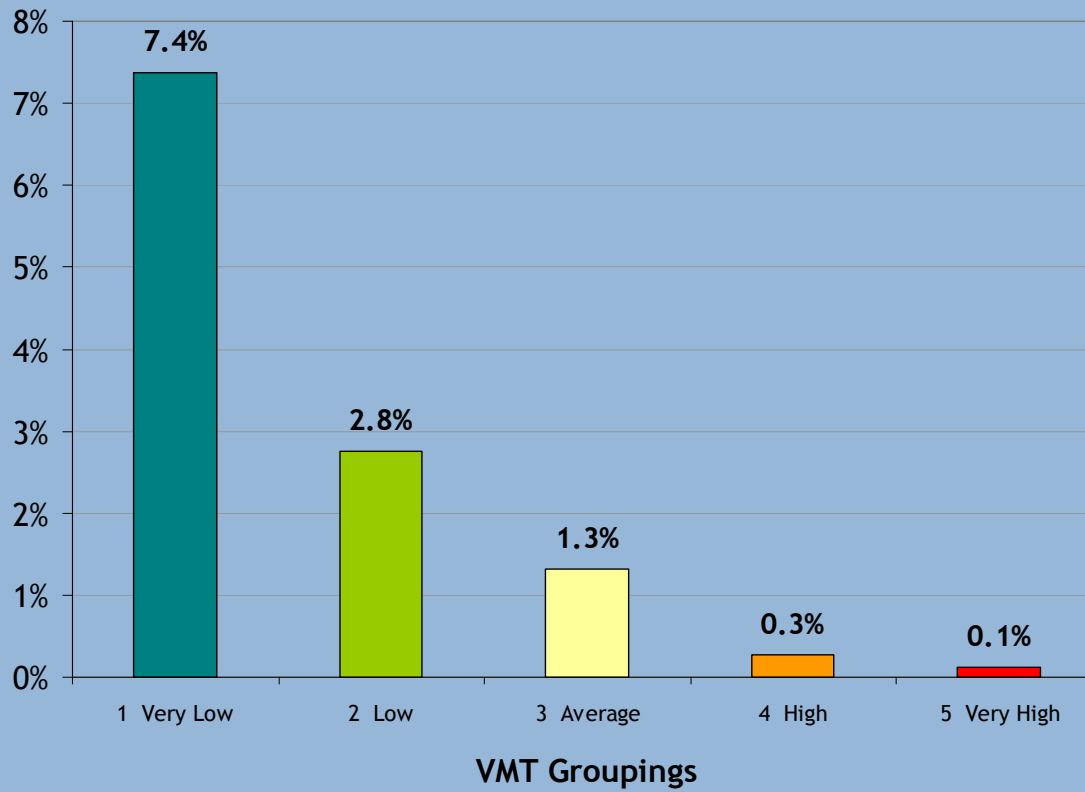
- Regional Average = 7.5 %
- Higher share in lower VMT areas





# Transit Mode Share in Prototype Areas

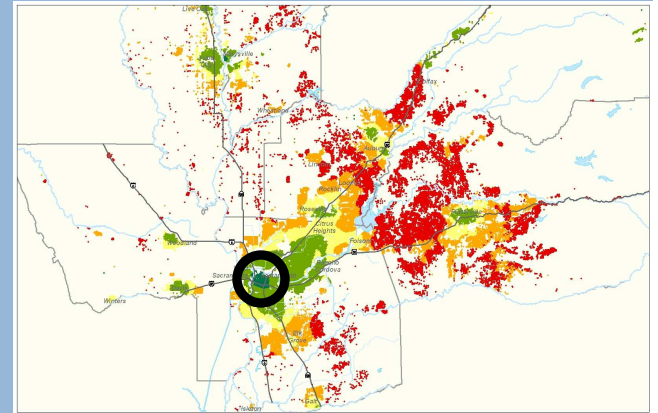
- Regional Average = 1.2 %
- Higher share in lower VMT areas



# Drill Down into Lower VMT Prototype Areas (Groups 1 and 2)



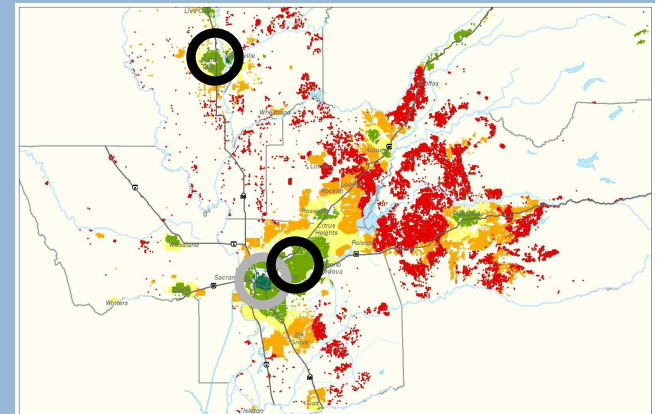
- Very Low VMT area (Group 1)
  - Midtown Sacramento



# Drill Down into Lower VMT Prototype Areas (Groups 1 and 2)

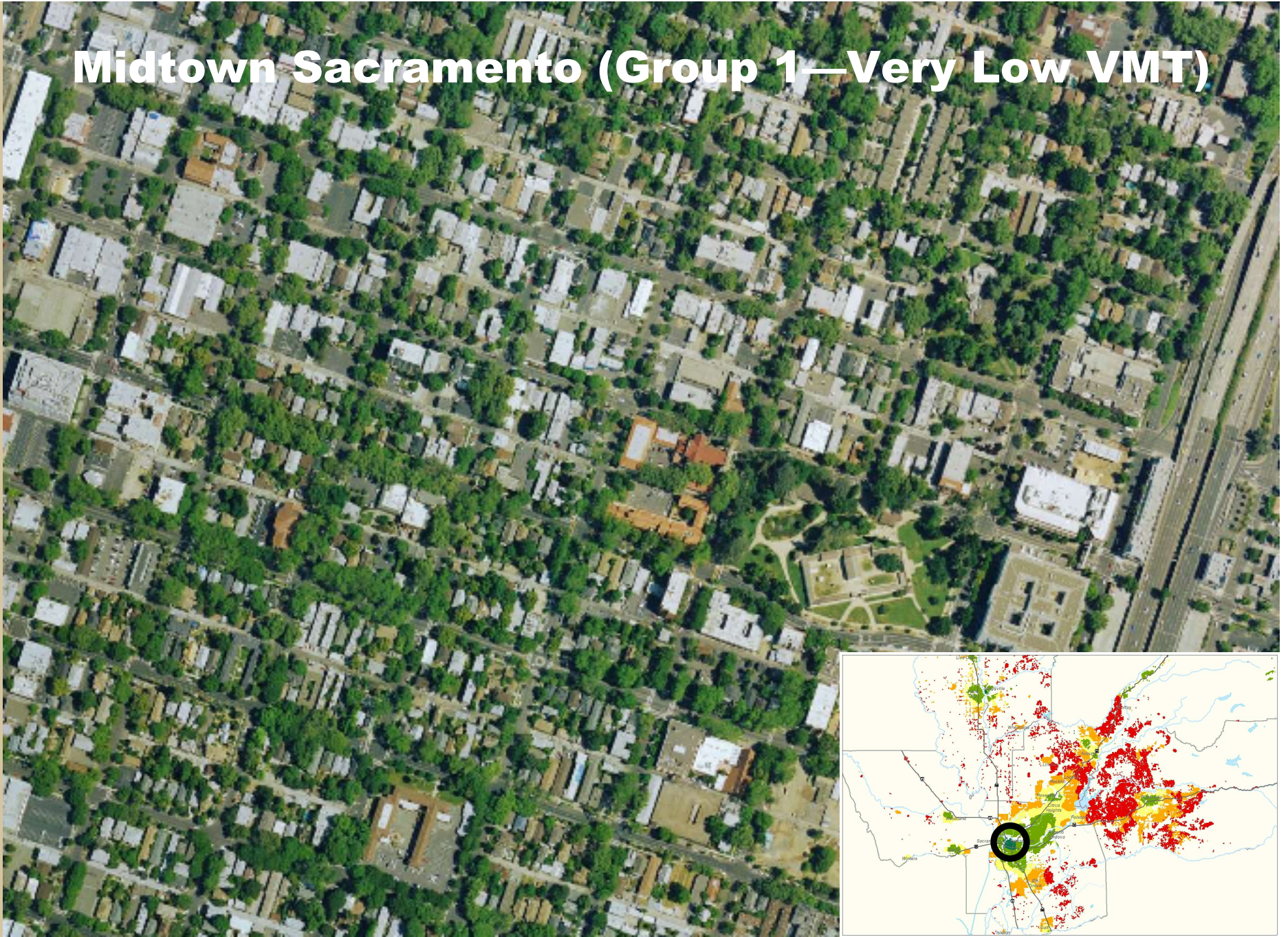


- Very Low VMT area (Group 1)
  - Midtown Sacramento
- Low VMT areas (Group 2)
  - Arden Arcade
  - Yuba City





# Midtown Sacramento (Group 1—Very Low VMT)

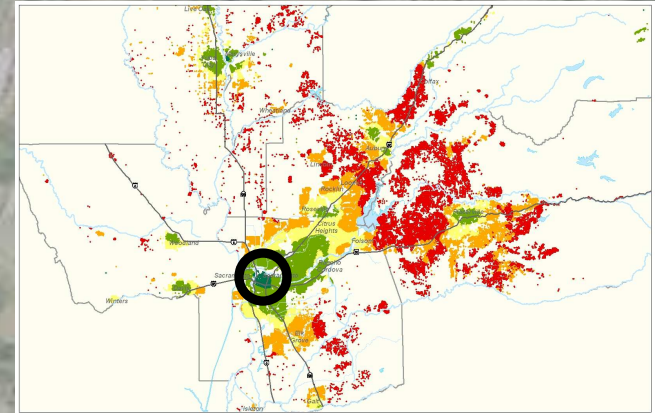


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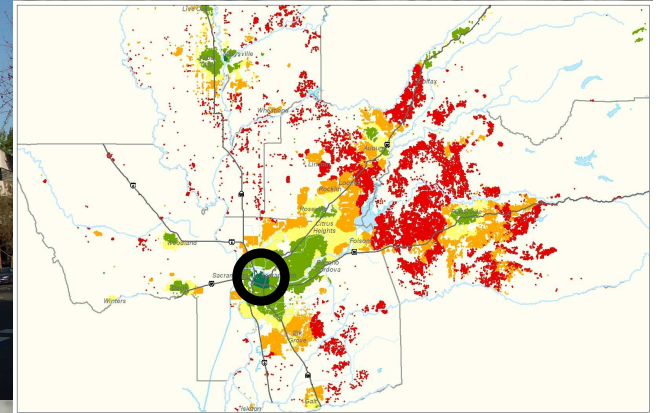
## Midtown Sacramento—Land Use

- Adjacent to CBD
- Mixed office, retail, residential
- Small-lot single family + apartments
- Small blocks, grid pattern
- High frequency transit



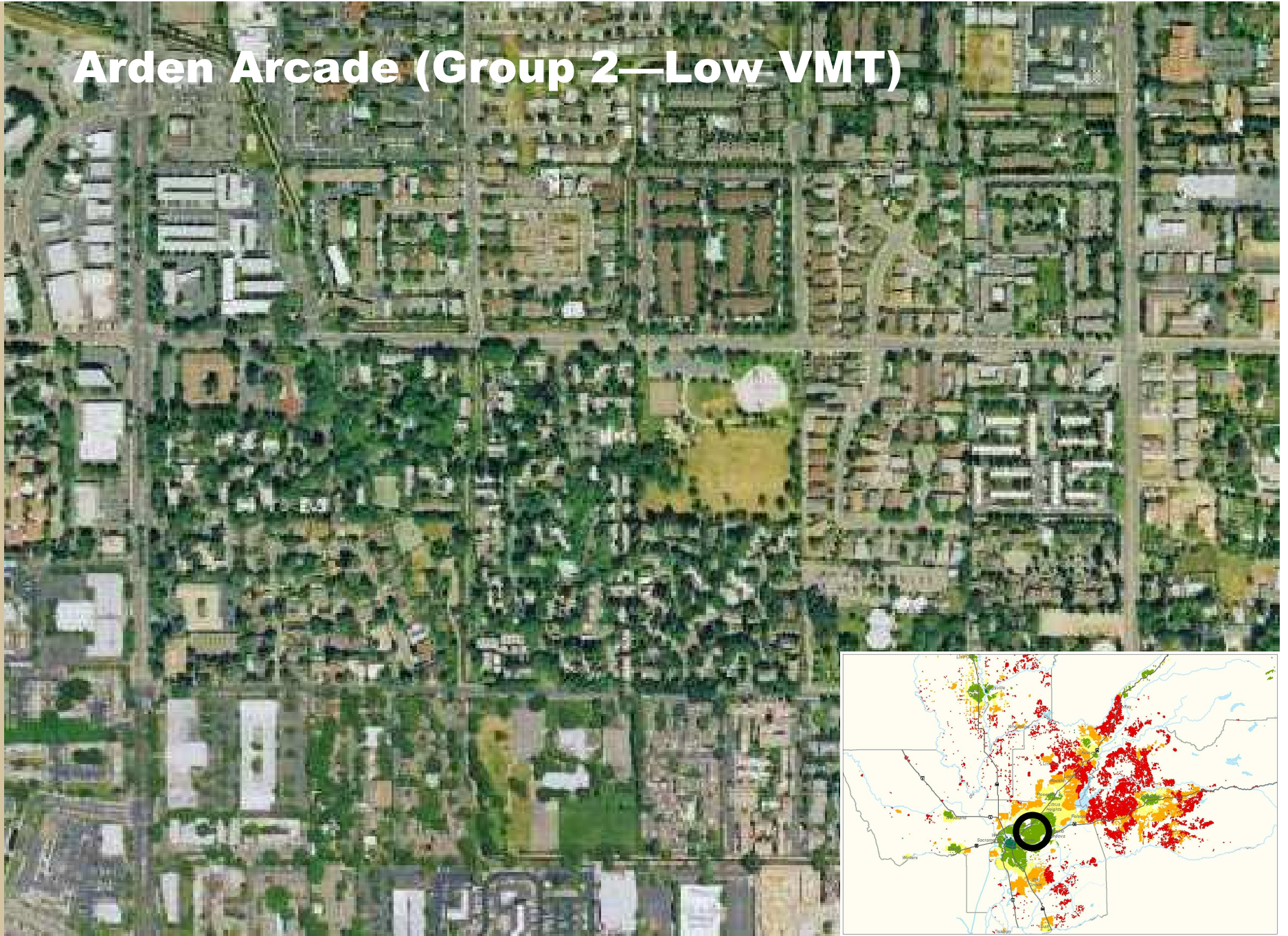


# Midtown Sacramento—Development Types





## Arden Arcade (Group 2—Low VMT)

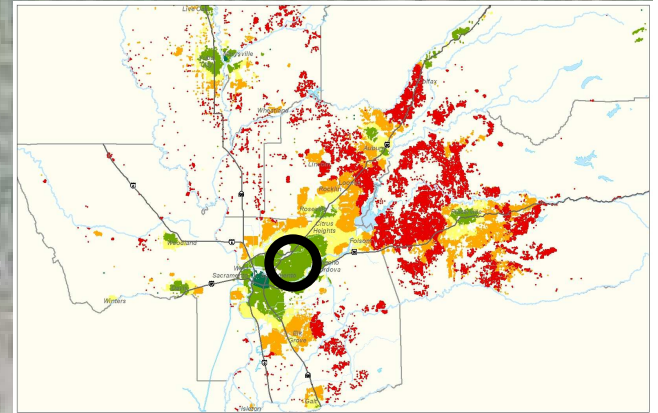


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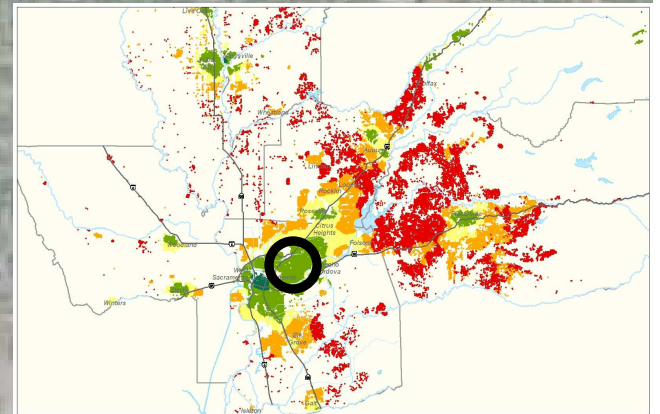


## Arden Arcade—Land Use

- Inner suburban, 5 miles from CBD
- Low/medium density retail and commercial strip
- Large-lot single family + some large scale multi-family
- Large blocks, fragmented street pattern
- High frequency transit



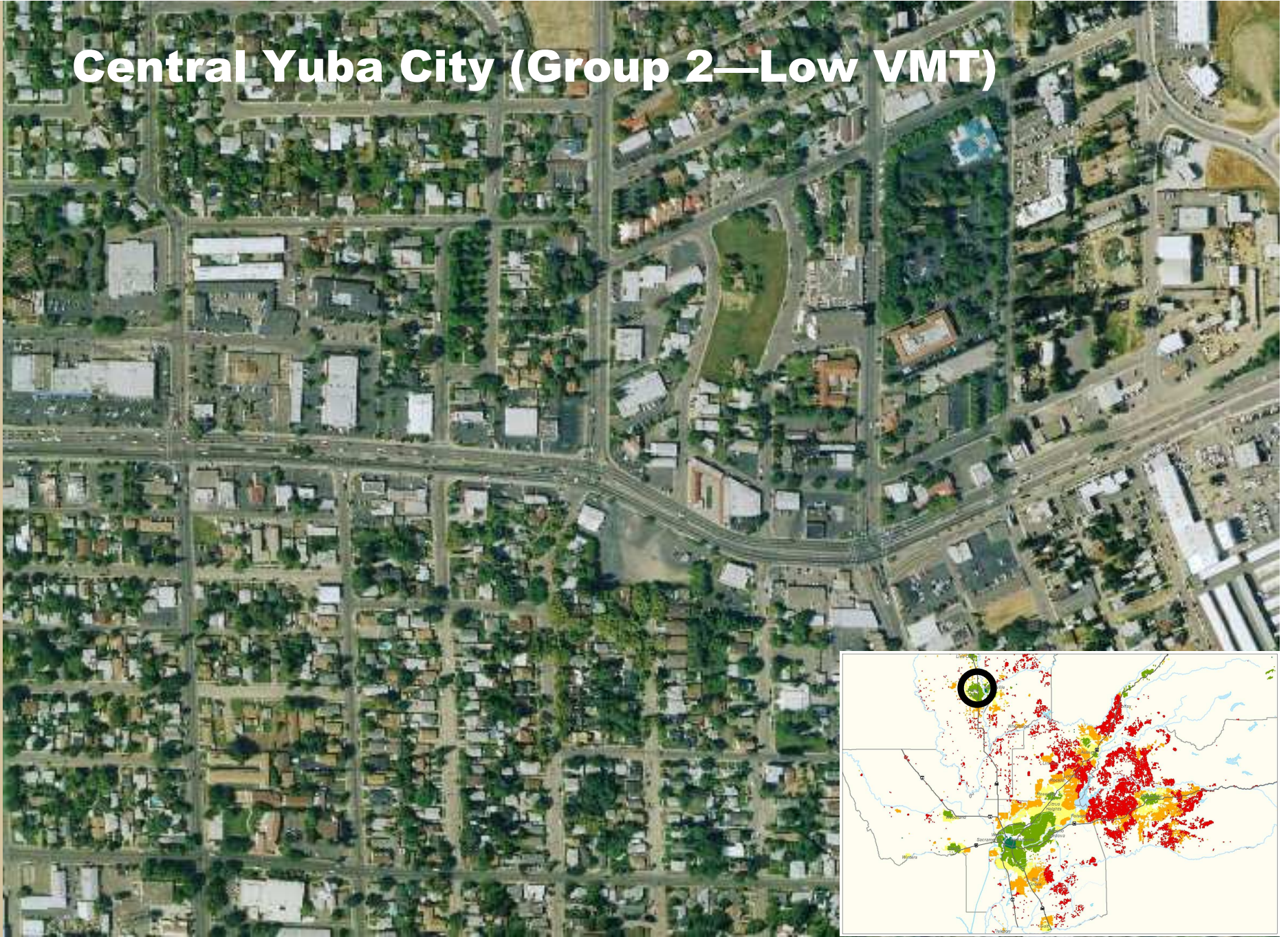
# Arden Arcade—Development Types



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## Central Yuba City (Group 2—Low VMT)

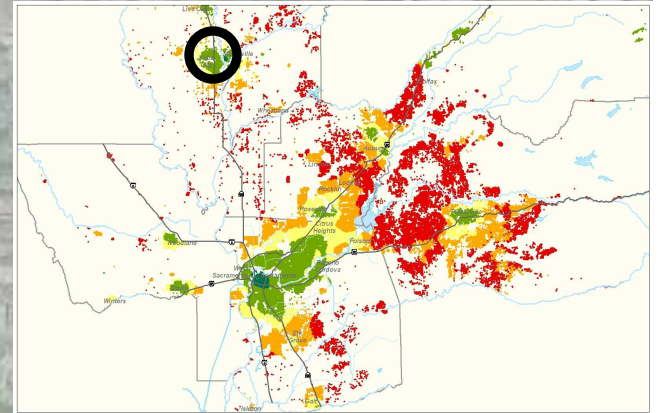


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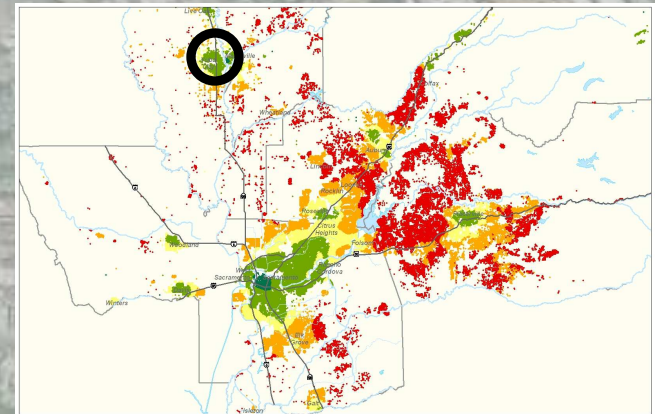
## Central Yuba City—Land Use

- Historic farm-market town
- Strip commercial and large lot single family residential
- Medium street grid in residential, large blocks in commercial and retail areas
- Low frequency transit



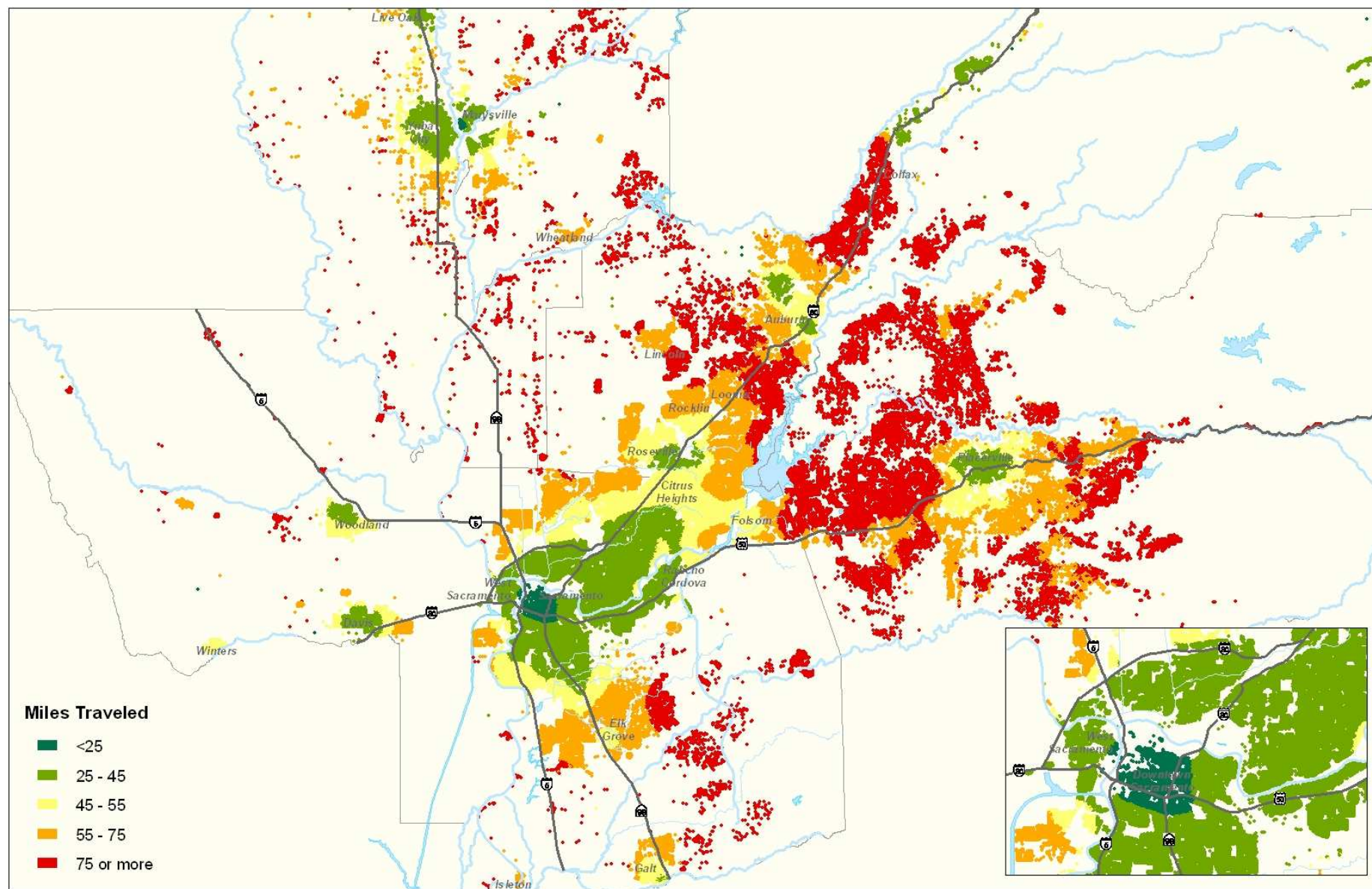


# Central Yuba City—Development Types



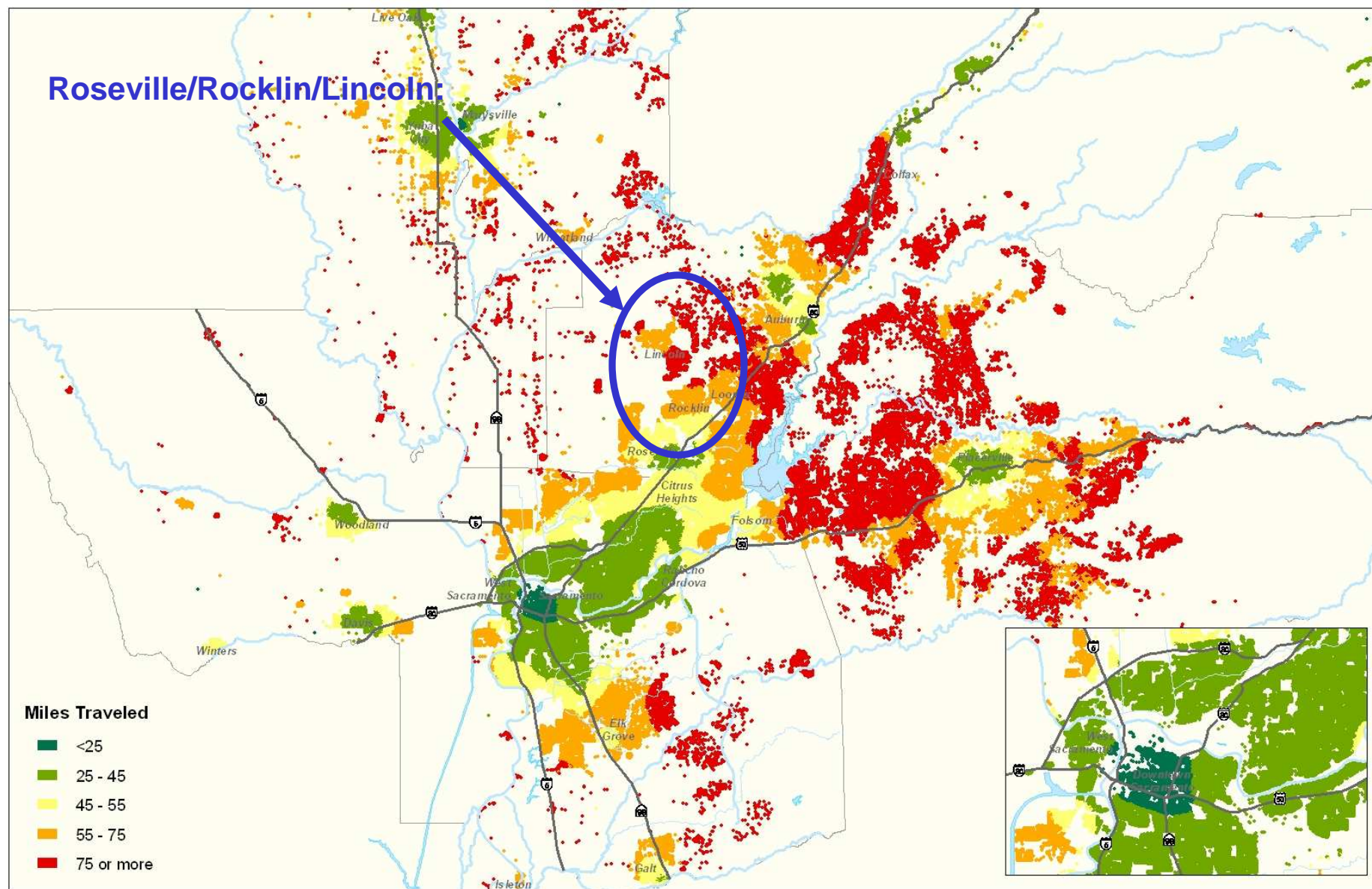


# 2005 VMT Per Household



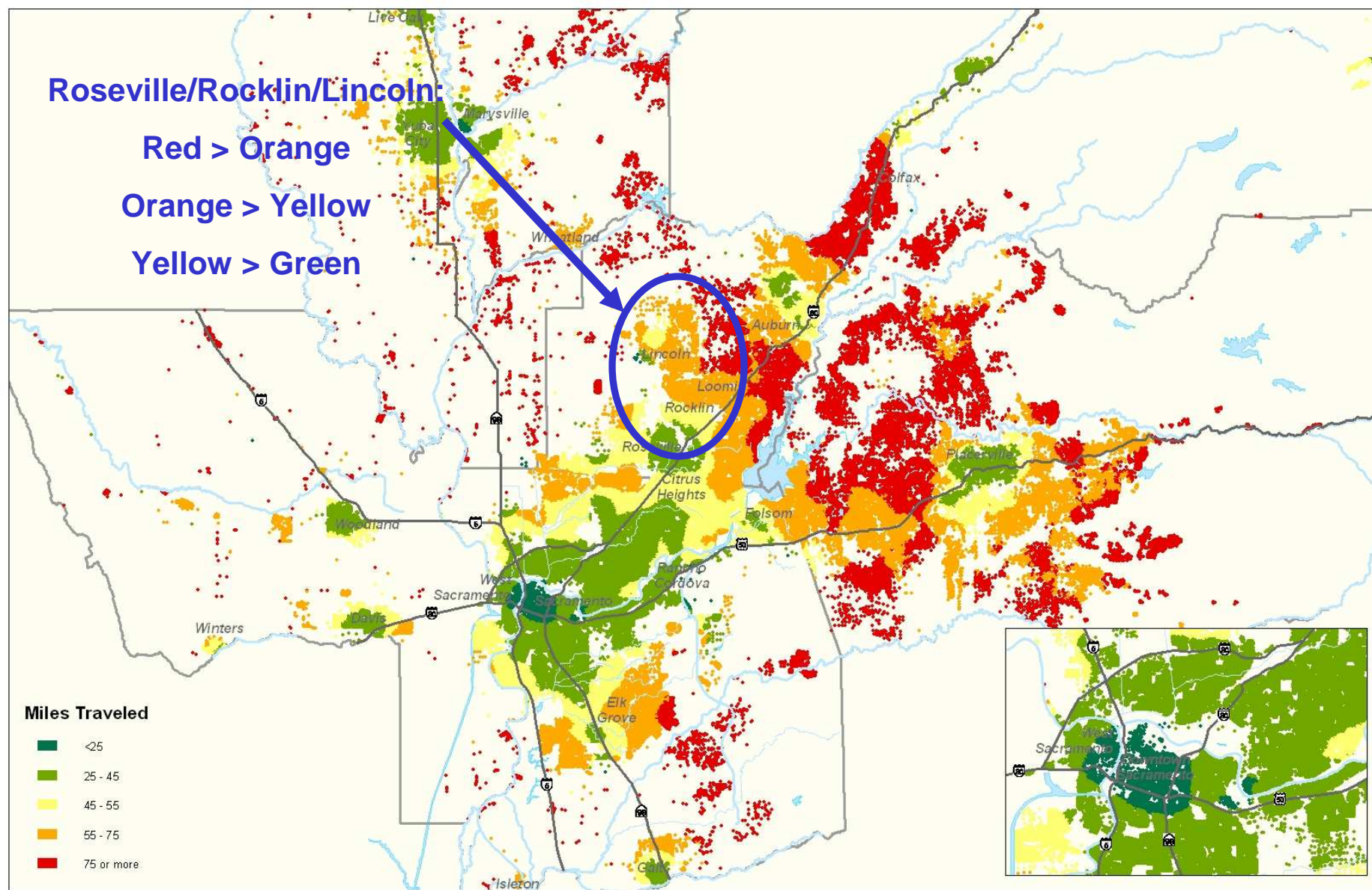
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# Areas of Improvement: 2005 VMT / HH



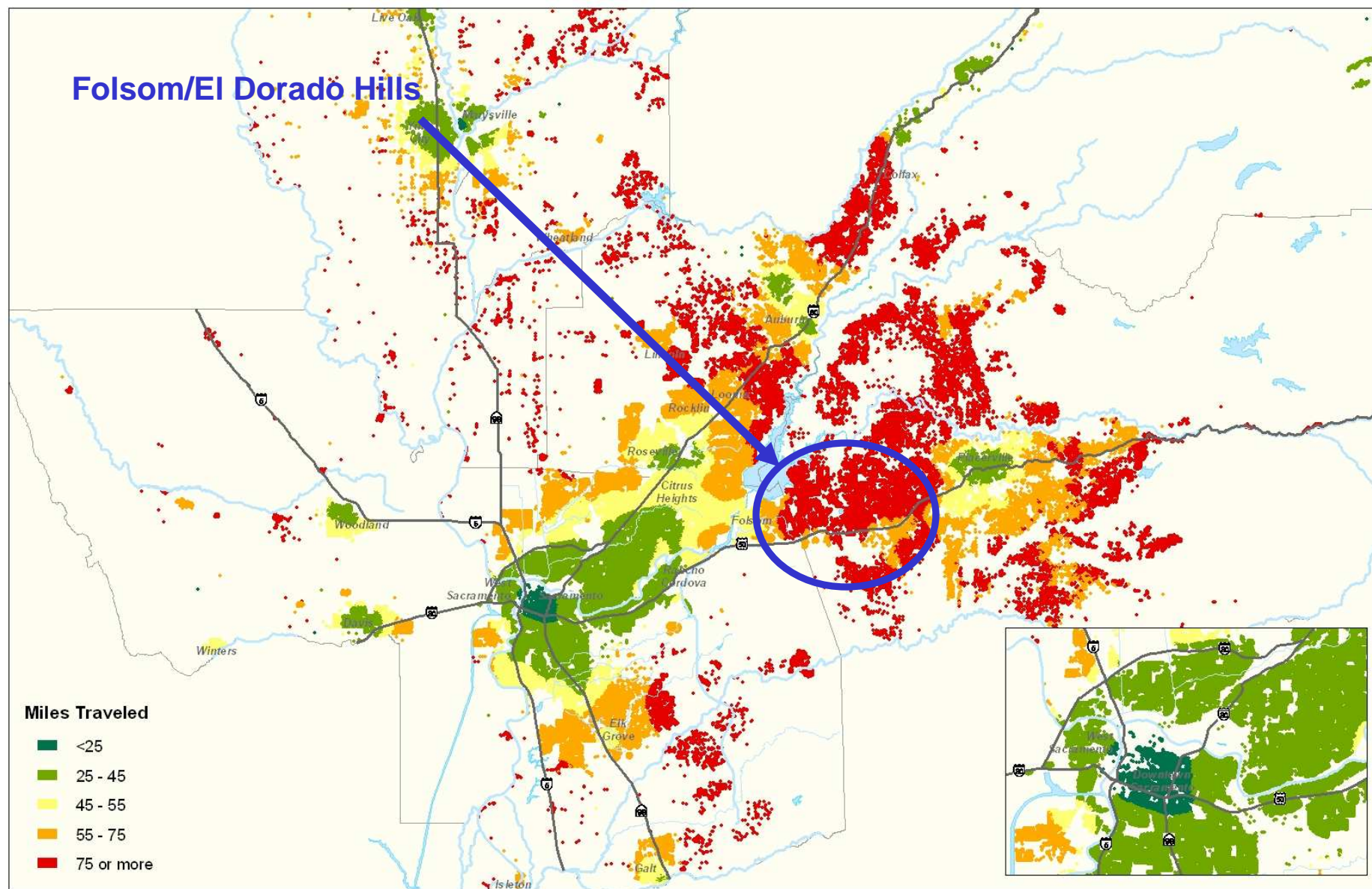


# Areas of Improvement: 2035 MTP VMT / HH

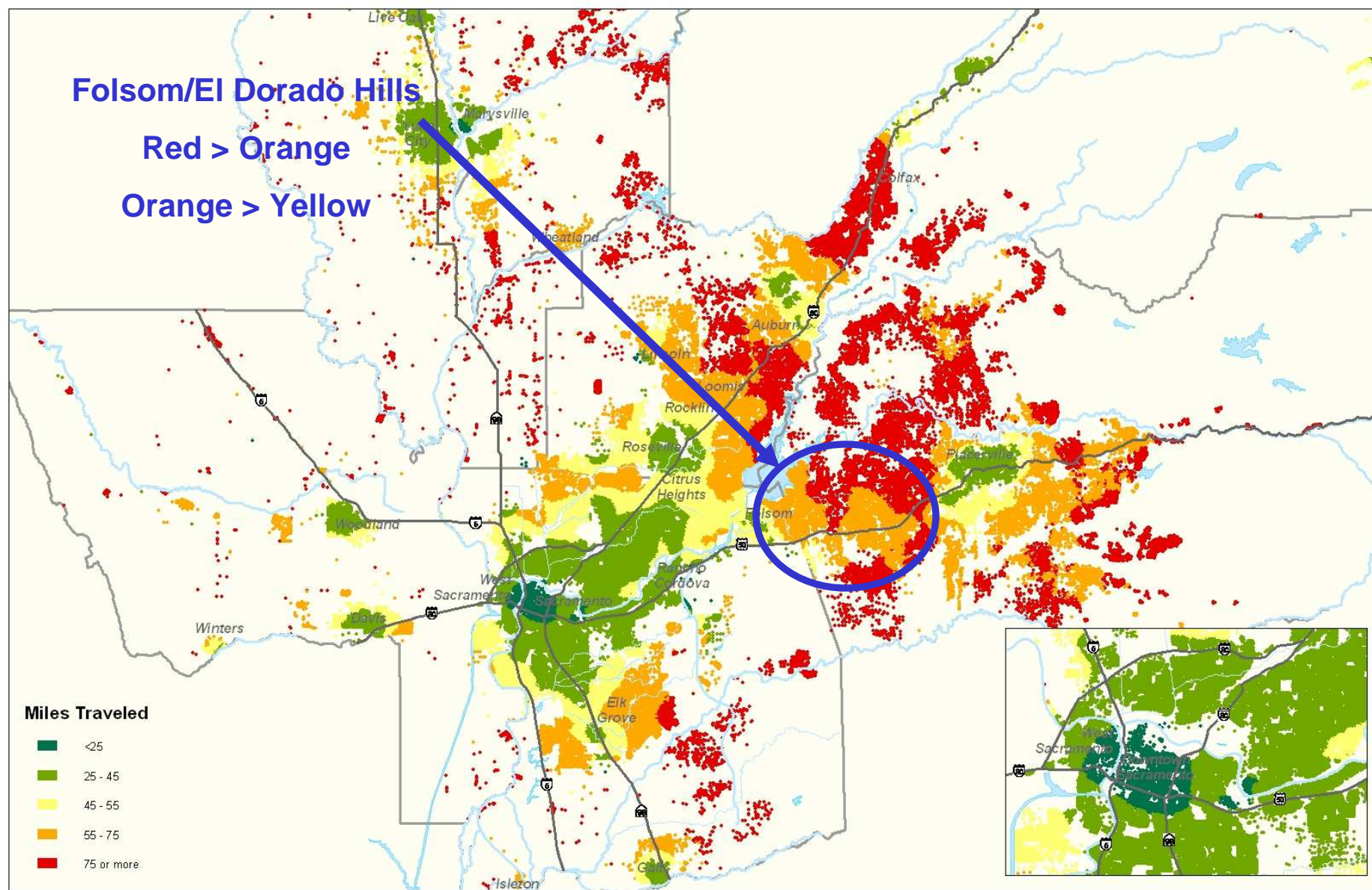




# Areas of Improvement: 2005 VMT / HH



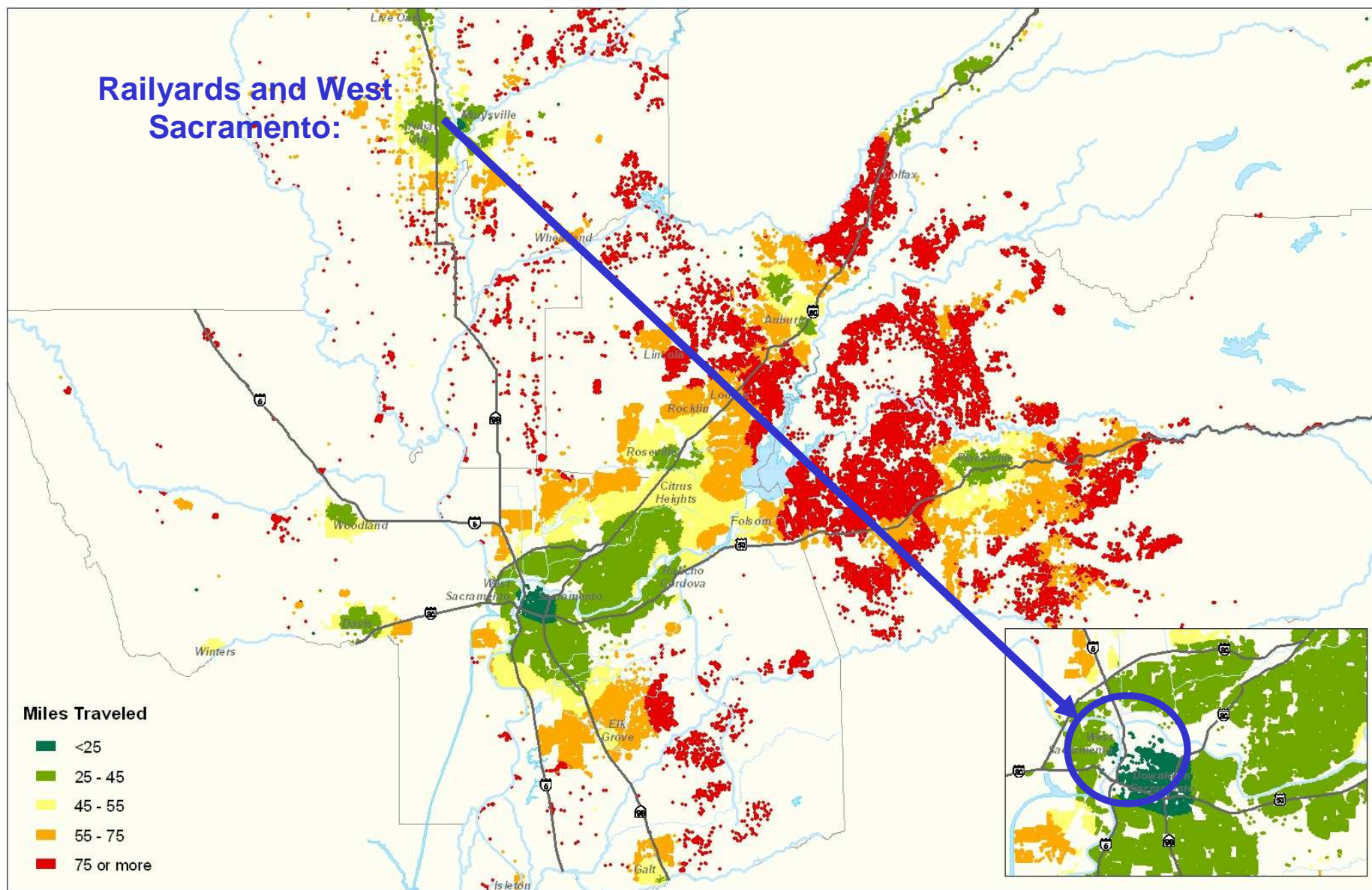
# Areas of Improvement: 2035 MTP VMT / HH





# Areas of Improvement: 2005 VMT / HH

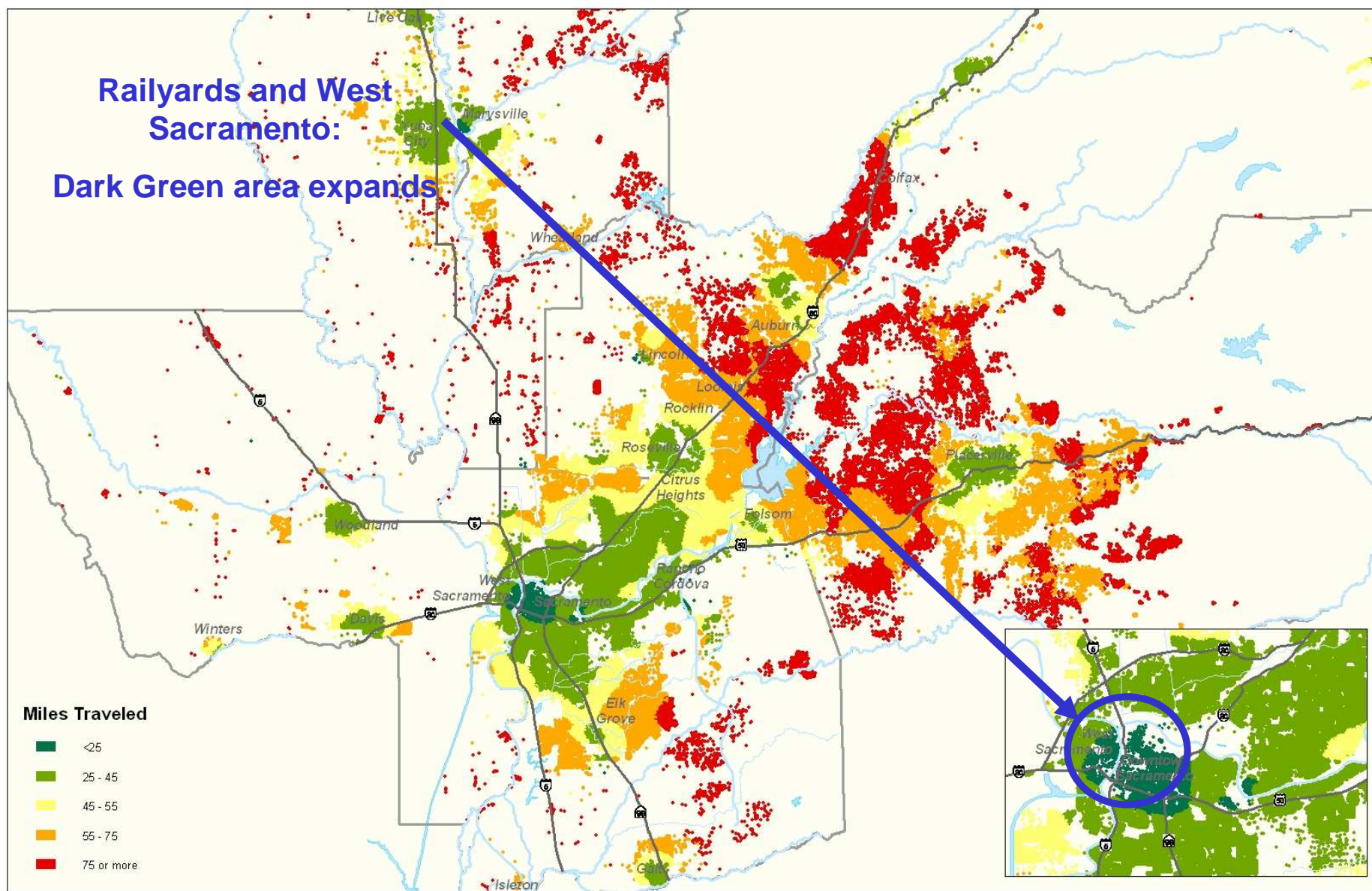
Railyards and West  
Sacramento:



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# Areas of Improvement: 2035 MTP VMT / HH

Railyards and West  
Sacramento:  
Dark Green area expands





# Regional Baseball Analogy

- From Christopher Leinberger
- Unique roles for cities within a region
- Not “one size fits all”

